ABSTRACT

Methods and apparatus are presented for improving the feedback of channel information to a serving base station, which allows a reduction in the reverse link load while allowing the base station to improve the forward link data throughput. Over a channel quality indicator channel, three subchannels are generated; the re-synch subchannel, the differential feedback subchannel, and the transition indicator subchannel. The information carried on each subchannel can be used separately or together by a base station to selectively update internal registers storing channel conditions. The channel conditions are used to determine transmission formats, power levels, and data rates of forward link transmissions.